

CLAIMS

1. A chip package comprising:

a leadframe including a die attach pad centrally located therein and a plurality of wire bonding pads peripherally located therein;

5 at least one aperture in the die attach pad;

at least one die formed on the die attach pad;

at least one bonding wire for electrically connecting the die and the wire bonding pads; and

10 a mold compound for encapsulating the die and the bonding wire to form a chip package, wherein the mold compound is formed in the aperture.

2. The chip package of claim 1, wherein the aperture is formed fully through the die attach pad.

3. The chip package of claim 1, wherein the aperture is formed partially through the die attach pad.

15 4. The chip package of claim 1, wherein the aperture is formed using a combination of a full etch process and a half etch process.

5. The chip package of claim 1, wherein the shape of the aperture is one of the following: a rectangle, a square, an oval, a triangle, a circle, or a combination thereof.

6. The chip package of claim 1, wherein the chip package is a leadframe-based Chip Scale Package.

7. The chip package of claim 1, wherein the aperture includes a plurality of apertures formed around the at least one die.

5 8. The chip package of claim 7, wherein the at least one die includes at least first and second dies, and at least one of the plurality of apertures is disposed between the first and second dies.

9. The chip package of claim 1, wherein the aperture extends horizontally, vertically, or diagonally.

10. A method of providing a chip package, comprising the steps of:
100 providing a leadframe including a die attach pad centrally located therein and a plurality of wire bonding pads peripherally located therein;
105 providing at least one aperture in the die attach pad;
providing at least one die on the die attach pad;
110 providing at least one bonding wire for electrically connecting the die and the wire bonding pads; and
115 providing a mold compound for encapsulating the die and the bonding wire to form a chip package, wherein the mold compound is formed in the aperture.

11. The method of claim 10, wherein the step of providing the aperture includes:
forming the aperture fully through the die attach pad.
12. The method of claim 10, wherein the step of providing the aperture includes:
forming the aperture partially through the die attach pad.
- 5 13. The method of claim 10, wherein the step of providing the aperture includes:
forming the aperture through the die attach pad using a combination of a full etch
process and a half etch process.
14. The method of claim 10, wherein the shape of the aperture is one of the following:
a rectangle, a square, an oval, a triangle, a circle, or a combination thereof.
- 10 15. The method of claim 10, wherein the chip package is a leadframe-based Chip Scale
Package.
16. The method of claim 10, wherein the aperture includes a plurality of apertures
formed around the at least one die.
17. The method of claim 16, wherein the at least one die includes a plurality of dies, and
15 at least one of the plurality of apertures is disposed between the plurality of dies.

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18. The method of claim 10, wherein the aperture extends horizontally, vertically, or diagonally.